

## **REMARKS**

### **I. Amendments to the Claims**

By the foregoing amendments to the claims, claims 7, 15, 18, and 22 have been amended; claims 1-6, 8-14, 17, 20, 23-26 and 29-40 have been canceled; and new 41-75 have been added.

In particular, claim 7 has been amended to recite that the pfl and ldhA activities are inherent in the microorganism.

Claim 15 has been amended by incorporating the subject matter of original claim 17.

Claim 18 has been amended by incorporating the subject matter of original claim 20.

Claim 22 has been amended by incorporating the subject matter of original claims 23-26.

New claim 41 is supported at least at page 10, lines 16-27 of the present specification.

New claims 42 and 43 each correspond to original claim 8.

New claims 44 and 45 each correspond to original claim 9.

New claims 46-51 each correspond to original claim 10.

New claims 52 and 57 each correspond to original claim 11.

New claims 64-69 each correspond to original claim 33.

New claims 70-75 each correspond to original claim 34.

The amendments to the claims have been made without prejudice or disclaimer to any subject matter canceled or recited herein. Applicants reserve the right to file one or more continuation and/or divisional applications directed to any canceled subject matter. No new matter has been added, and entry of the foregoing amendments is respectfully requested.

### **II. Response to Restriction Requirement**

In the Office Action, the Examiner has issued a Restriction Requirement, requiring election of one of the eight groups identified by the Examiner on pages 2-3 of the Office Action.

In support of the Restriction Requirement, the Examiner has stated that the inventions listed as Groups I-VIII do not relate to a single inventive concept, because they lack the same or corresponding technical features. According to the Examiner, the technical feature linking Groups I-VIII appears to be that they all relate to methods and products for producing lactic acid in a fermentation process by culturing a microorganism wherein the activity of the IdhA

may be enhanced and the activity of the pfl may be inactivated or decreased. However, because *E. coli* mutants having elevated IdhA activity or defective pfl activity are allegedly described in Yang et al. or Zhou et al., respectively, the Examiner has concluded that the invention as recited in the current claims does not define a contribution over the prior art and thereby fails to constitute a special technical feature.

In response to the Restriction Requirement, Applicants hereby elect, with traverse, Group III (*i.e.*, claims 7-9). The reasons for traversal are as follows.

Applicants respectfully submit that the claims as amended herein meet the unity of invention requirement, since the subject matter recited in the present claims share the following special technical feature:

(1) the activity of the FAD-dependent D-lactate dehydrogenase (did) inherent in the microorganism is inactivated or decreased;

(2) the activity of the pyruvate formate-lyase (pfl) inherent in the microorganism is inactivated or decreased; and

(3) the activity of the *Escherichia coli*-derived NADH-dependent D-lactate dehydrogenase (IdhA) inherent in the microorganism is enhanced.

Applicants submit that microorganisms having such a special technical feature are not taught or suggested in the references cited by the Examiner. Accordingly, when Group III is examined, at least Groups VI and VII should be rejoined and examined in the same application. Applicants further note that the promoter specified in these Groups relates to enhancement of the activity of the *Escherichia coli*-derived NADH-dependent D-lactate dehydrogenase (IdhA).

### **III. Response to Election of Species Requirement**

In addition, if any one of Groups III, VI, or VIII is elected in response to the Restriction Requirement, the Examiner has further required an Election of Species for prosecution on the merits, as described in detail at pages 6-9 of the Restriction and Election of Species Requirement.

In particular, if Group III is elected, Applicants must elect one of groups 1)a)-d) as listed on page 6 for initial prosecution on the merits.

In response to the Election of Species Requirement, Applicants further elect, for the purposes of searching only, the species a) did activity inherent in the microorganism is

inactivated, activity of pyruvate formate-lyase (pfl) is inactivated or decreased and activity of *Escherichia coli*-derived NADH-dependent D-lactate dehydrogenase (ldhA) is enhanced.

In making the species election, Applicants understand that the Office will follow the procedure set forth in M.P.E.P. § 809.02, which provides for a complete action on the merits of all claims readable on the elected species, and in M.P.E.P. § 803.02, whereby on the finding of allowable species, examination will continue with the non-elected species until all species have been examined or a non-allowable species is found.

### **CONCLUSION**

This response is made without prejudice or disclaimer to any non-elected subject matter, and Applicants reserve the right to file one or more continuation and/or divisional applications directed to any non-elected subject matter.

From the foregoing, further and favorable action in the form of a Notice of Allowance is respectfully requested and such action is earnestly solicited.

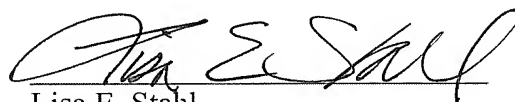
In the event that there are any questions concerning this amendment or the application in general, the Examiner is respectfully requested to telephone the undersigned so that prosecution of the application may be expedited.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

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By:



Lisa E. Stahl

Registration No. 56,704

**Customer No. 21839**  
P.O. Box 1404  
Alexandria, VA 22313-1404  
703 836 6620